SeaThigor
High Performance Mechanical Face Seals
The Thordon SeaThigor seal is a mechanical face seal for 300 mm (11.8”) to 650mm (25.6”) water lubricated propeller shafts found in yachts, cruise ships, merchant ships and naval vessels. The SeaThigor has evolved from a design first tested in 2003 and improved during the next decade.

Manufactured to the same exacting standards as our high performing range of Thordon bearings, the SeaThigor seal uses the highest quality, hard wearing, silicon carbide faces and our proprietary elastomeric polymers to offer the best combination of strength/stiffness and reliability.

- Manufactured for long wear life and reduced maintenance costs
- No visible leakage
- SiC faces and Thordon elastomers ensure no need for replacement parts
- Safe Return To Port Emergency Seal
- Outside pressurized design to counter leakage direction
- Metal compression springs used to maintain constant face closing forces
Thordon High Performance Solutions
Ship owners and managers know Thordon products are the proven choice for performance and value. SeaThigor mechanical face seals are manufactured to last and are designed for use in newbuild construction and retrofits.

Maintenance-Free Shaft Seals
The SeaThigor seal is designed for a maintenance free life meaning that it is able to provide no visible or minimum leakage, long life and high operational reliability. When operating in general duty service, our intention has been to design and manufacture a seal with an extended service life and our extensive testing has confirmed this.

Outside Pressurized Balanced Hydraulic Design
The seal is designed with an enclosed housing having the rotor module inside the seal, so no moving parts are exposed to the exterior. This design arrangement also places the pressurized water on the outside of the sealing rings, using the water pressure to keep the faces closed. This is particularly important for deep water operation, when there are pressure fluctuations that can open the faces of traditional seals, causing leaks. SeaThigor uses a balanced design with an optimal balance ratio which further enhances the operational stability when subject to fluctuation of water pressure in rough seas. It is also able to tolerate axial and radial shaft excursions.

Safe Return to Port Emergency Seal
If there is a face failure to the SeaThigor, the Safe Return To Port Emergency Seal can be engaged. The seal is not meant to be completely water tight, but unlike other “maintenance seals”, the shaft can be rotated and the vessel can proceed to a repair facility on its own power, at reduced speeds.
Quick and Responsive Service
It takes quality products to be globally successful in the water-lubricated bearing and shaft seal industry. It also takes great service to keep customers coming back. Thordon Bearings Inc. is geared to respond quickly to supply high performance seal and bearing solutions. Our products arrive quickly, fit right and last!

Extensive Distribution Network
Thordon Bearings has an extensive distribution network of more than 85 distributors in 100 countries to supply and service our global customer base. Non-standard requests are met with responsive design, quick machining and speedy delivery.

Application Engineering
Thordon engineers work closely with customers to provide innovative bearing and shaft seal system designs and solutions. While SeaThigor seals are designed as a standard product that will virtually bolt into place, global installation technical support is available for those cases where specific application engineering is required.

Manufacturing Quality
Thordon Bearings Inc. is a family-owned company founded in 1911 that operates a state-of-the-art polymer processing plant, machine shop and new product development facilities in Burlington, Ontario, Canada. In addition, we own a new leading edge machining and polymer production plant in Slupsk, Poland that can also source metal parts for seals. We manufacture to ISO 9001:2008 Quality System requirements. Contact us for our installation references.

High Performance Bearings: Industry-Leading Service
Thordon Bearings is an industry leader in the design, manufacture, supply and installation of high performance, pollution-free, shaft seal and bearing systems. We design all our products to last for the life of the vessel.